

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A system for purifying fluid, said system comprising:
a filtration canister for filtering particulates from the fluid and including;
~~a separate evaporation canister for removing liquid contaminants by evaporation;~~
and
~~wherein the filtration canister further comprises:~~
a cylindrical container;
a filter element for removing the particulates from the fluid;
the filtration canister adapted for receiving one of a plurality of types of
the filter element and for receiving fluid via a pipe connection;
a head for sealing an upper portion of the container;
a threaded stud for securing the head and the container;
a centering spring for securing the filter element around the threaded
stud;
and
means for securing and sealing the head and the filter element therein
without allowing fluid to bypass the filter element; and
a separate evaporation canister, in flow communication with the filtration
canister, for removing liquid contaminants by evaporation and including:
~~wherein the evaporation canister further comprises:~~
a heating wand and an evaporator cup assembly housed within the
evaporation canister, said evaporator cup having a base containing an orifice through which fluid
flow is received, the heating wand being disposed adjacent the base and over the orifice of the
evaporator cup and defining a fluid volume above the heating wand that is greater than the fluid
volume therebeneath, wherein the fluid flow from the orifice engulfs the heating wand thereby
facilitating heating of the fluid rising in the evaporator cup and the evaporation of the liquid
contaminants
~~an evaporator cup housed within a container of the evaporation canister~~
~~for receiving the fluid;~~
~~wherein the evaporator cup includes a heating wand and a base adapted to~~
~~allow the fluid to pool at the base causing the fluid to disperse over a large surface area;~~
~~wherein the container is adapted to receive the fluid via an orifice located~~
~~below the heating wand, the heating wand adapted to heat the fluid in the evaporator cup; and~~
~~wherein the fluid flows underneath the heating wand and engulfs the~~
~~heating wand, thereby facilitating evaporation of the liquid contaminants.~~
2. (Previously Presented) The system of claim 1, wherein said filter element is adapted for filtering oil.
3. (Previously Presented) The system of claim 1, wherein said filter element is adapted for filtering hydraulic fluid.
4. (Canceled)

5. (Previously Presented) The system of claim 1, wherein the head of the filtration canister comprises:
a compression ring for pressing against a portion of the filter element;
a first orifice for receiving oil from an engine;
a second orifice for receiving filtered oil; and
a gasket for sealing the head against the filtration canister.
6. (Previously Presented) The system of claim 1, wherein said filtration canister further comprises:
a sampling valve for sampling fluid from the filtration canister;
wherein the sampling valve is adapted for sampling fluid during fluid flow into the filtration canister.
7. (Previously Presented) The system of claim 1 further comprising a shut-off valve for preventing flow of fluid into the filtration canister by causing the fluid to bypass the filtration canister.
8. (Canceled)
9. (Previously Presented) The system of claim 1, wherein the evaporator cup is manufactured with exterior ridges for impeding the flow of the fluid.
10. (Original) The system of claim 1, wherein the evaporation canister comprises:
a visual indicator for alerting a user as to whether electrical power is supplied to the heating wand; and
a conduit for receiving and removing vaporized liquid contaminants from the evaporation canister.
11. (Previously Presented) The system of claim 1 further comprising a metering valve located between the filtration canister and the evaporation canister for selective positioning to control fluid flow.
12. (Withdrawn) A filtration canister for filtering particulates from a fluid, said filtration canister comprising:
a filter element for removing the particulates from the fluid;
a container for receiving the filter element and the fluid;
a head for sealing an upper portion of the container;
a threaded stud for securing the head and the container; and
a centering spring for securing the filter element around the threaded stud.
13. (Withdrawn) The filtration canister of claim 12, further comprising:
a sampling valve for allowing a sample of the fluid to be removed from the container;
a fluid impervious washer for preventing fluid from bypassing the filter element;
a sealing gasket for providing support to the fluid impervious washer;
a resistance spring for providing pressure to the sealing gasket, fluid impervious washer, and a lower portion of the filter element.

14. (Withdrawn) The filtration canister of claim 13, wherein the sealing gasket is formed of stainless steel and the fluid impervious washer is formed of nitrile material.

15. (Withdrawn) The filtration canister of claim 12, wherein the container is formed of Aluminum Kone Drawing Quality cold rolled steel and wherein the container is plated with Commercial Bright Nickel Plating.

16. (Withdrawn) The filtration canister of claim 12, wherein the head is formed of 319 Cast Aluminum Alloy.

17. (Withdrawn) The filtration canister of claim 12, wherein the head comprises:
a compression ring for pressing against an upper portion of the filter element;
a first orifice for receiving oil from an engine;
a second orifice for receiving filtered oil; and
a gasket for sealing the head against the filtration canister.

18. (Withdrawn) The filtration canister of claim 12, wherein the head is secured to the threaded stud via a head cap, and wherein the head cap is secured to the head via an E-ring.

19. (Withdrawn) An evaporation canister for separating liquid contaminants from fluid, said evaporation canister comprising:

an evaporator cup for receiving fluid, the evaporator cup including a large substantially flat lower surface for increasing the surface area of the fluid;
a container for receiving fluid and housing the evaporator;
a head for sealing an upper portion of the container;
a heating wand for heating the fluid in the evaporator cup; and
wherein the fluid flows underneath the heating wand and spreads to increase the surface area of the fluid, thereby facilitating evaporation of the liquid contaminants.

20. (Withdrawn) The evaporation canister of claim 19, wherein the container is formed of Aluminum Kone Drawing Quality cold rolled steel and plated with Commercial Bright Nickel Plating, and wherein the head is formed of 319 Cast Aluminum Alloy.

21. (Withdrawn) The evaporation canister of claim 19, wherein the head comprises an orifice for receiving wires that supply electrical power to the heating wand, and wherein the wires also supply electrical power to a visual indicator for alerting a user as to whether the heating wand is receiving electrical power.

22. (Withdrawn) A method for purifying fluid, said method comprising the steps of:
providing fluid to a filtration canister;
filtering particulates from the fluid via a filter element;
transmitting the filtered fluid from the filtration canister to a separate evaporation canister;
heating the filtered fluid to remove liquid contaminants; and
removing the vaporized liquid contaminants from the evaporation canister.

23. (Withdrawn) The method of claim 22 further comprising the step of lowering the flow in the evaporation canister to reduce the amount of heat necessary to remove the liquid contaminants.

24. (Withdrawn) The method of claim 23 further comprising the step of utilizing a metering valve to reduce the flow in the evaporation canister.

25. (Withdrawn) The method of claim 22, wherein the filtering comprises the steps of:

entering an outer portion of the filtration canister;
flowing through the filter element to remove the particulates from the fluid; and
accumulating in a central portion of the filtration canister for transmission to the evaporation canister.

26. (Currently Amended) The system of claim 1, wherein the container is formed of cold rolled steel and plated with ~~Commercial Bright~~ Nickel Plating, and wherein the head of the evaporation canister is formed of Aluminum Alloy.

27. (Previously Presented) The system of claim 1, wherein the head of the evaporation canister comprises an orifice for receiving wires that supply electrical power to the heating wand.

28. (Currently Amended) The system of claim 1, wherein the cylindrical container of the filtration canister is formed of cold rolled steel and plated with ~~Commercial Bright~~ Nickel Plating, and wherein the head of the filtration canister is formed of Aluminum Alloy.

29. (Currently Amended) The system of claim 5, wherein the gasket is formed of stainless steel and a fluid impervious washer is formed ~~as a~~ of nitrile ~~washer material~~.

30. (Previously Presented) The system of claim 1, wherein the head of the evaporation canister includes an outer raised edge that is oriented to be placed inside the container and prevents liquid from leaking out of the filtration canister.

31. (Currently Amended) A system for purifying fluid, said system comprising:
a filtration canister for filtering particulates from the fluid;
a separate evaporation canister, in flow communication with the filtration canister, for removing liquid contaminants by evaporation and including:
a heating wand and an evaporator cup assembly housed within the evaporation canister, said evaporator cup having a base containing an orifice through which fluid flow is received, the heating wand being disposed adjacent the base and over the orifice of the evaporator cup and defining a fluid volume above the heating wand that is greater than the fluid volume therebeneath, wherein the fluid flow from the orifice engulfs the heating wand thereby facilitating heating of the fluid rising in the evaporator cup and the evaporation of the liquid contaminants

~~wherein the evaporation canister further comprises:
a container for receiving fluid and housing an evaporator;
an evaporator cup for receiving filtered fluid from the filtration canister via an orifice located below a heating wand, the evaporation cup including an interior portion, an~~

~~exterior portion, and a base adapted to allow the fluid to pool at the base causing the fluid to disperse over a large surface area;~~

~~wherein the heating wand is adapted for heating the fluid to release liquid contaminants;~~

~~wherein the interior portion of the evaporation cup fills with the heated fluid to a point at which the heated fluid spills over to the exterior portion of the evaporation cup;~~

~~wherein the fluid flows underneath the heating wand and engulfs the heating wand, thereby facilitating evaporation of the liquid contaminants; and~~

~~wherein the purified fluid collects at a lower portion of the evaporation canister.~~